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AMENDMENTS IN THE CLAIMS:

1. (Original) A direct sampling global positioning system (GPS) receiver for anti-interference operations, comprising:

an input for receiving an analog interference signal at GPS frequencies;

an analog-to-digital converter (ADC), operatively coupled to the input, for converting the analog interference signal into a digital signal; and

a processor for processing the digital signal to detect interference at the GPS frequencies and providing an output based thereon.

2. (Original) The receiver of claim 1, wherein the ADC is a flash ADC.

3. (Original) The receiver of claim 2, wherein the ADC samples the analog interference signal at a sampling frequency of approximately 2 gigahertz or greater.

4. (Original) The receiver of claim 1, further comprising a bandpass filter coupled between the input and the ADC with a pass band comprising the GPS frequencies.

5. (Original) The receiver of claim 1, further comprising an automatic gain control circuit for controlling a power level of the analog interference signal input to the ADC.

6. (Original) The receiver of claim 1, wherein the processor utilizes a plurality of finite impulse response (FIR) filters.

7. (Original) The receiver of claim 6, wherein the plurality of FIR filters are implemented via machine code executed by the processor.

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8. (Original) A GPS anti-interference system for locating a source of the analog interference signal, comprising:

an antenna array; and

a plurality of receivers as recited in claim 1,

wherein the inputs of the plurality of receivers are coupled to elements of the antenna array so as to receive the analog interference signal; and

each of the plurality of receivers digitize the analog interference signal and a combined output of the plurality of receivers is indicative of the location of the source of the analog interference signal.

9. (Original) The system of claim 8, wherein the ADC in each of the plurality of receivers is a flash ADC.

10. (Original) The system of claim 9, wherein the ADCs sample the analog interference signal at a sampling frequency of approximately 2 gigahertz or greater.

11. (Original) The system of claim 8, wherein each of the plurality of receivers further comprises a bandpass filter coupled between the input and the ADC with a pass band comprising the GPS frequencies.

12. (Original) The system of claim 8, wherein each of the plurality of receivers further comprises an automatic gain control circuit for controlling a power level of the analog interference signal input to the ADC.

13. (Original) The system of claim 8, wherein the processor in each of the plurality of receivers utilizes a plurality of finite impulse response (FIR) filters.

14. (Original) The system of claim 13, wherein the plurality of FIR filters are implemented via machine code executed by the processor.

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15. (Original) A method for conducting direct sampling global positioning system (GPS) anti-interference operations, the method comprising the steps of:

receiving an analog interference signal at GPS frequencies;

converting the analog interference signal into a digital signal; and

processing the digital signal to detect interference at the GPS frequencies and providing an output based thereon.

16. (Original) The method of claim 15, wherein the step of converting the analog interference signal into a digital signal is done using a flash ADC.

17. (Original) The method of claim 16, wherein the ADC samples the analog interference signal at a sampling frequency of approximately 2 gigahertz or greater.

18. (Original) The method of claim 15, further comprising the step of bandpass filtering the analog interference signal with a pass band comprising the GPS frequencies prior to converting the analog interference signal into the digital signal.

19. (Currently Amended) The method of claim ~~[1]~~ 15, further comprising the step of performing automatic gain control to control a power level of the analog interference signal prior to converting the analog interference signal into the digital signal.